SELFRIDGE FIELD, BUILDINGS NOS. 20, 21
(USAF Ready Shelter, Fighter Aircraft)
(Aircraft Shelter)
E. Ramp, S. of intersection of Wilbur Wright and Birch Sts.
Mt. Clemens vicinity
Macomb County
Michigan

HAER No. MI-116-W

HAER MICH 50-AMOLE N

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD National Park Service Great Lakes Systems Office Department of the Interior 1709 Jackson Street Omaha, NE 68102-2571

HAER MICH 50-MTCLE.V, IW-

Selfridge Field
Building #20 USAF Fighter
Aircraft Ready Shelter
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HISTORIC AMERICAN ENGINEERING RECORD

SELFRIDGE FIELD, 8UILDING #20, #21

HAER No. MI-116-W

(U.S. AIR FORCE, READY SHELTER, FIGHTER AIRCRAFT)
(Aircraft Shelter)

I. INTRODUCTION

Location:

East Ramp, South of Wilbur Wright 8oulevard

Selfridge Air National Guard Base, Mt. Clemens vicinity,

Macomb County, Michigan

Quad/UTM:

U.S.G.S. Mount Clemens East Quadrangle, Universal

Transverse Mercator Coordinates: 17.350800.4718630

(Building #20)

17.350800.4718550 (8uilding #21)

Date of Construction:

1958 (modified 1962, 1963: #20, 1974: #21)

Present Owner:

Air National Guard 3500 Fetchet Avenue

Andrews Air Force Base, Maryland 20762

Present Use:

Vacant

Significance:

8uildings #20 and #21 were constructed to service The Air Defense Command alert fighter aircraft in support of Selfridge's Cold War mission. The ADC at Selfridge occupied these fighter shelters on the East Ramp and a flight complex in the northern portion of the base (buildings numbered in the #560 to #570 series). These buildings represent Selfridge's role in the Cold War alert fighter capability and as a regional fighter protection node in Cold War defense of the Detroit area. They are an

extremely rare site type in Michigan.

Historian:

William Rutter

Midwest Environmental Consultants

May, 1996

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II. HISTORY

These shelters were designed by Strobel and Salzman Engineers, of New York, and were erected in 1958¹. Their hangar doors were modified in 1961 by plans provided by Wheeler, Becker and Sando, Architects and Engineers of Detroit². In 1962 Elgin R. Pruder, architect of Mount Clemens provided plans for an Air Crew Shelter to be attached to the south elevation of Building #20³. This addition, as well as aircraft pockets 13 and 14, were destroyed by a fire in 1963⁴. In September, 1963 plans were created by Giffels and Rossetti, Architects-Engineers of Detroit to repair the fire damage to Building #20 caused by the jet fire in the shelter formerly located between it and Building #21⁵. These repairs included replacing some of the concrete floor and damaged sections of the roof, replacing siding on the south elevation with new corrugated steel siding on existing girts, and replacing girts and installing new corrugated siding on the north wall (adjacent to the burned shelter). The

¹Original as-built construction plans, on file, Selfridge Base Museum

²Plans on file, Selfridge Base Museum

³Plans on file, Selfridge Base Museum

⁴Report and photographs on file, Selfridge Base Museum Historical Files

⁵Plans on file, Selfridge Base Museum

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concrete block unit is a Fuel System Maintenance and Corrosion Facility erected in 1974 from plans provided by Ellis Naeyaert and Associates, of Detroit⁶

III. DESCRIPTION

Building #20 is a massive, rectangular plan shelter comprised of two bays each a 106 feet 6 inch by 89 feet 6 inch flat-roofed unit that contains four aircraft "pockets" occupying a location on the East Ramp. Building #21 is a rectangular plan shelter identical each of the two bays comprising Building #20, and contains two aircraft "pockets." It is a 106 feet 6 inch by 89 feet 6 inch flat-roofed structure aligned to and situated just south of Building #20.

The primary (east) elevation is composed of two bays containing four aircraft cells, that are entirely defined by massive, corrugated aluminum doors that swing out and upward to permit access to the interior. Cell numbers "9," "10," "11," and "12" are still visible, painted north to south on the facade above the doors. Each pocket's 98-foot-wide corrugated aluminum door leafs provide a 31 foot clearance and are operated by a series of counterweights. The exteriors of the door leafs display a triangular wind brace that projects out

⁶Plans on File, Selfridge Base Museum

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3 feet 6 inches from the doors at a point six feet above the tarmac. This device is constructed of standard aluminum pipe braces that suspend a horizontal 5 inch diameter pipe that engages into the top of the shelter void when the door swings upward to open. A pedestrian access door is centrally positioned in each pocket's door leaf beneath the wind brace.

The north, west, and south elevations present a four foot high concrete block knee wall with control joints capped by steel flashing, above which insulated corrugated steel siding is attached to a steel frame. The building essentially lacks fenestration on its north and south elevations, displaying a single pedestrian entry on the north and south elevations, the latter shielded by a small shed roof entry vestibule. The building rests on a concrete slab and is shielded by a flat roof, comprised of corrugated metal supported by steel trusses.

The interior, which is unobstructed open space, presents 31 feet 3" vertical clearance below the roof trusses, which occupy the upper six feet of the structure. A ladder and cage provided access to the roof trusses from the interior.

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The primary (east) elevation of Building #21 is composed of a single bay containing two cells that are defined entirely by a massive, corrugated aluminum door that swings out and upward to permit access to the interior. Cell numbers "15" and "16" are still visible, painted north to south on the facade above the door.

A single story, rectangular plan, 27-by-89 foot concrete block unit extends from the building's north elevation. It present five bays defined by four functionally positioned steel pedestrian access doors and a steel frame window positioned adjacent to the door at the northwest corner of the building. This concrete block unit is shielded by a shallow pitch shed roof. The east and west elevations of this concrete unit lack fenestration, while its south elevation contains a single pedestrian entry door shielded by a shed roof entry vestibule. The interior of the aircraft cell is identical to Building #20. The interior of the masonry unit extending from the north elevations consists of six rooms, from west to east, an administration office, workroom, toilet room, mechanical equipment room, and fuel cell maintenance room.

IV. BIBLIOGRAPHY

A. BOOKS
Anonymous, <u>Brief History of Selfridge Air Force Base</u>, 1917-1960,